



SEQUENCE LISTING

<110> HOVANESSIAN, Ara
BRIAND, Jean-Paul
MULLER, Sylviane
KRUST, Bernard
SVAB, Josette
SAID, Elias

<120> NOVEL SYNTHETIC PEPTIDE VACCINES FOR HIV: THE CBD
EPITOPE AS AN EFFECTIVE IMMUNOGEN TO ELICIT BROADLY
NEUTRALIZING ANTIBODIES AGAINST HIV

<130> B5602A - JAZ/KN (I.PASTEUR & CNRS)

<140> US10/820,816

<141> 2004-04-09

<150> EP03290919.4

<151> 2003-04-11

<160> 21

<170> PatentIn Ver. 2.1

<210> 1

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: caveolin
binding motif in which Xaa is any amino acid

<400> 1

Trp Xaa Xaa Xaa Xaa Trp Xaa Xaa Trp
1 5

<210> 2

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 619 to
633 of HIV-1

<400> 2

Leu Glu Gln Ile Trp Asn Asn Met Thr Trp Met Gln Trp Asp Lys
1 5 10 15

<210> 3

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 662 to
676 of HIV-2

<400> 3

Leu Thr Pro Asp Trp Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
1 5 10 15

<210> 4

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 604 to
633 of HIV-1

<400> 4

Cys Thr Thr Ala Val Pro Trp Asn Ala Ser Trp Ser Asn Lys Ser Leu
1 5 10 15

Glu Gln Ile Trp Asn Asn Met Thr Trp Met Gln Trp Asp Lys
20 25 30

<210> 5

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 651 to
676 of HIV-1

<400> 5

Cys His Thr Thr Val Pro Trp Pro Asn Asp Ser Leu Thr Pro Asp Trp
1 5 10 15

Asn Asn Met Thr Trp Met Gln Trp Asp Lys
20 25

<210> 6

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 651 to
676 of HIV-2

<400> 6
 Cys His Thr Thr Val Pro Trp Pro Asn Asp Ser Leu Thr Pro Asp Trp
 1 5 10 15

Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
 20 25

<210> 7
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: caveolin
 binding domain corresponding to amino acids 604 to
 676 of HIV-1

<400> 7
 Cys Thr Thr Ala Val Pro Trp Asn Ala Ser Trp Ser Asn Lys Ser Leu
 1 5 10 15

Glu Gln Ile Trp Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
 20 25 30

<210> 8
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Caveolin
 binding motif

<400> 8
 Trp Asn Asn Met Thr Trp Met Glu Trp
 1 5

<210> 9
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Caveolin
 binding motif

<400> 9
 Trp Asn Asn Met Thr Trp Gln Glu Trp
 1 5

<210> 10
 <211> 20
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: C-20 peptide
scaffolding domain of caveolin from amino acids 82
to 101 of caveolin-1

<400> 10

Asp Gly Ile Trp Lys Ala Ser Phe Thr Thr Phe Thr Val Thr Lys Tyr
1 5 10 15

Trp Phe Tyr Arg
20

<210> 11

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Variant of SEQ
ID No. 2 in which X is any amino acid, n is 0 to
20 and m is 0 to 20

<400> 11

Xaa Leu Glu Gln Ile Trp Asn Asn Met Thr Trp Met Gln Trp Asp Lys
1 5 10 15

Xaa

<210> 12

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Variant of SEQ
ID No. 3 in which X is any amino acid, n is 0 to
20 and m is 0 to 20

<400> 12

Xaa Leu Thr Pro Asp Trp Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
1 5 10 15

Xaa

<210> 13

<211> 15

<212> PRT

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Variant of SEQ
 ID No. 2 in which Xaa is Trp, Phe or Tyr

<400> 13
 Leu Glu Gln Ile Xaa Asn Asn Met Thr Xaa Met Gln Xaa Asp Lys
 1 5 10 15

<210> 14
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Variant of SEQ
 ID No. 3 in which Xaa is Trp, Phe or Tyr

<400> 14
 Leu Thr Pro Asp Xaa Asn Asn Met Thr Xaa Gln Glu Xaa Glu Arg
 1 5 10 15

<210> 15
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Variant of SEQ
 ID No 2 in which Xaa is Ala, Gly, Val, Leu, Ile,
 Phe, Trp, Tyr, Met, Cys, Ser, Thr, Gln, Glu, Asp,
 Lys, Arg, His or Pro

<400> 15
 Leu Glu Gln Ile Trp Asn Xaa Met Thr Trp Met Gln Trp Asp Lys
 1 5 10 15

<210> 16
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Variant of SEQ
 ID No. 2 in which Xaa is Ala, Gly, Val, Leu, Ile,
 Phe, Trp, Tyr, Met, Cys, Gln, Asp, Glu, Lys, Arg,
 His or Pro

<400> 16
 Leu Glu Gln Ile Trp Asn Asn Met Xaa Trp Met Gln Trp Asp Lys
 1 5 10 15

<210> 17
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ
ID No. 3 in which Xaa is Ala, Gly, Val, Leu, Ile,
Phe, Trp, Tyr, Met, Cys, Ser Thr, Gln, Asp, Glu,
Lys, Arg, His or Pro

<400> 17
Leu Thr Pro Asp Trp Asn Xaa Met Thr Trp Gln Glu Trp Glu Arg
1 5 10 15

<210> 18
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ
ID No. 3 in which Xaa is Ala, Gly, Val, Leu, Ile,
Phe, Trp, Tyr, Met, Cys, Gln, Asp, Glu, Lys, Arg,
His or Pro

<400> 18
Leu Thr Pro Asp Trp Asn Asn Met Xaa Trp Gln Glu Trp Glu Arg
1 5 10 15

<210> 19
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleic acid
of SEQ ID No. 2

<400> 19
ctggagcaga tctggaacaa catgacctgg atgcagtggg acaag 45

<210> 20
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleid Acid
of SEQ ID No. 2

<400> 20
ctggaacaga tttggaataa catgacctgg atggagtggg acaga 45

<210> 21
<211> 45
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Nucleid Acid
of SEQ ID No. 2

<400> 21

ctggaacaga tttggaataa catgacctgg atgcagtggg acaaa

45

3